

General characteristics

>> Lega 6082 <<

Aluminium- Silicon- Magnesium- Manganese alloy for general use, characterised by good resistance values, on top of the 6000 range; good resistance to corrosion; excellent weldability, good workability at the utensil machines.

It is used under the form of metal sheets, tapes, bars, tubes, sections.

Available in stock in state T6 (T651 for plates); other states are supplied on demand.

Minimal mechanical characteristics at ambient temperature

Metal sheets and tapes

State	Rm (MPa)	Rp0.2 (MPa)	A %
T6	310	260	6

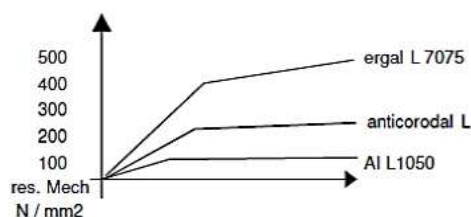
(1) Valori orientativi

Minimal mechanical characteristics at ambient temperature

Bars

Mechanical resistance chart

State	Thickness (mm)	Rm (MPa)	Rp0.2 (MPa)	A %
T6	Up to 20	295	250	8
	Da 20 a 150	310	260	8
	From 150 to 200	280	240	8
	From 200 to 250	270	200	8



Minimal mechanical characteristics at ambient temperature

Tubes and profiles

State	Thickness (mm)	Rm (MPa)	Rp0.2 (MPa)	A %
T6	Up to 5	290	250	8
	From 5 to 25	310	260	10

Physical characteristics

Density: 2.69 g/cm³ a 20 °C

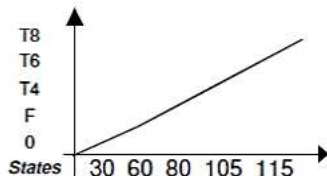
conductivity at 20 °C: 172 W/m °C (state T6)

Modulus of elasticity: 69000N/mm²

Fusion temperature: 570 - 645

Thermal dilatation coefficient : 23.40

Hardnesses expressed in HB



Technological characteristics:

Workability at utensil machines: good Thermal

Formability: Llow i H26 state; very good

in state 0

Weldability: good (TIG – MIG)

Anodisation behaviour : good

Resistance to corrosion: good

Typical uses

Automobile and railway constructions; structural details with high requirements for corrosion resistance; architectural details.

Correspondence between international designations Alloy of the family

France	Germany	Italy	USA
6082	AlMgSi1	9006/4 ex 3571	6082

Al - Mg - Si

Chemical composition of alloy 6082 in %

Cu	Fe	Mn	Mg	Si	Zn	Cr	Ti
0.10	0.50	0.4 - 1	0.6 - 1.2	0.7 - 1.3	0.2	0.25	0.1